

Date: Thursday, 12/14/2006 3:40:54 PM  
 User: Kirt Johnston

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: LONG STEP ASSEMBLY HIGH SKID RH
Job Number	: 29968		
Estimate Number	: 10274		
P.O. Number	: N/A	Part Number	: D350591312
This Issue	: 12/14/2006 S.O. No. : N/A	Drawing Number	: D3272 REV A
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: N/A Type : LARGE FAB ASSY	Drawing Revision	: A
Previous Run	: 29801	Material	: N/A
Written By	: <i>[Signature]</i>	Due Date	: 1/12/2007
Checked & Approved By	: <i>[Signature]</i> 06 12 15	Qty:	10 Um: Each
Comment	: Est Rev A 04.03.22 New issue KJ/RF		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	DC	DOCUMENT CONTROL
-----	----	------------------



Comment: DOCUMENT CONTROL

Photocopy bluefile and type labels as per PPP D350-591-311 CHG001

KS 06-12-18 (10)

2.0	D2622120C	Extrusion
-----	-----------	-----------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty Part Number	Description	Batch
1 D2622-120	Extrusion	328215

FF 07-01-03

10

3.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
-----	-------------	------------------------------



Comment: LARGE FABRICATION RESOURCE 1

1-Cut D2622-120 extrusion to 116.25" long as per Dwg D3272 using cutting table setup DT 8185-2A

RF 07-01-04

2-Drill extrusion as per Dwg D3272 using Jig DT8680 for rivets.

RF 07-01-04

3-Deburr

FF 07-01-04

10

4.0	QC5	INSPECT WORK TO CURRENT STEP
-----	-----	------------------------------



Comment: INSPECT WORK TO CURRENT STEP

07-01-05 (10)

5.0	D30671	End Plate
-----	--------	-----------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty Part Number	Description	Batch
-----------------	-------------	-------

RF 07-01-05 10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D358-591-312 PAR #: N/A Fault Category: Prod / FAB. ASS' LG. NCR: (Yes) No DQA: (D) Date: 04/10/11  
 QA: N/C Closed: (H) Date: 07.01.12

NCR: 29968		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07-01-04	3.3	3 holes <sup>were</sup> c'sunk on the inside with the deburring tool. Human error. One step only.	<i>[Signature]</i> AS1042	Fill the 3 holes with weld AS per QS1004, c'grind flush. Redrill using jig DT8680, c'c'sink carefully.	<i>[Signature]</i> 07-01-05	<i>[Signature]</i> 07-01-05	<i>[Signature]</i> AS1042	<i>[Signature]</i> 07-01-04
07-01-05	3.3	Step above is scrap. Too rough of a weld inside, and will cause an issue when installing the step leg ass'y.	<i>[Signature]</i> AS1042	Scrap; replace step. Use long step for a short one. I.D. c' stock.	<i>[Signature]</i> 07-01-05	<i>[Signature]</i> 07-01-05	<i>[Signature]</i> 07-01-05 AS1042	<i>[Signature]</i> 07-01-05

NOTE: Date & initial all entries

Date: Thursday, 12/14/2006 3:40:54 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID RH

Job Number: 29968

Part Number: D350591312

Job Number:



Seq. #:

Machine Or Operation:

Description :

1 D3067-1

End Plate *B29356*

*PE. 07.01.05 10*

6.0

D32191

Support



Comment: Qty.: 2.0000 Each(s)/Unit Total: 20.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D3219-1

Support

*B29223 = 7*

*B29758 = 13*

*PE. 07.01.05 10*

7.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Bevel end for welding FWD ONLY

2-Weld Support using Jig DT8719, weld Fwd End Plate as per QSI 004 & Dwg D3272

A/R Aluminum Rod *M1100237*  
*M19612*

3-Grind End Plate flush

*PE. 07.01.05 10*  
*PE. 07.01.05 10*  
*PE. 07.01.06 10*

8.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

*07/01/08 (10)*

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

*07-01-08 (10)*

10.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

*a.m. 07/01/08 (10)*

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

*PE. 07.01.08 10*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 12/14/2006 3:40:55 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID RH

Job Number: 29968

Part Number: D350591312

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

D3065041

Step Leg Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D3065-041

Step Leg Assy

B28738

*PE. 06.01.08 10*

13.0

D30661

Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

2 D3066-1

Spacer

B29609

*PE. 07.01.08 10*

14.0

MS20600AD4W4

Rivets



Comment: Qty.: 16.0000 Each(s)/Unit Total : 160.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

16 MS20600AD4W4

Rivet

M101649

*PE. 07.01.08 10*

15.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Assemble Leg Assembly as per Dwg D3272.

*PE. 07.01.08 10*

16.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

*12/07/08 (10)*

17.0

D30671

End Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D3067-1

End Plate

B29356

*PE. 07.01.08 10*

## WORK ORDER CHANGES

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_
















QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 12/14/2006 3:40:55 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services		Drawing Name: LONG STEP ASSEMBLY HIGH SKID RH	
Job Number: 29968		Part Number: D350591312	
Job Number:			
Seq. #:	Machine Or Operation:	Description :	
18.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1	
			
Comment: LARGE FABRICATION RESOURCE 1			
1-Bevel Aft end for welding		P.E. 07.01.08 10	
2-Inspect for foreign object as per QSI 024		P.E. 07.01.08 10	
3-Weld Aft End Plate as per QSI 004 & Dwg D3272		P.E. 07.01.08 10	
A/R Aluminum Rod M100237 M19612		FF 07.01.09 10	
19.0	QC9	VISUAL WELDING INSPECTION	
			
Comment: VISUAL WELDING INSPECTION			
20.0	QC5	INSPECT WORK TO CURRENT STEP	
			
Comment: INSPECT WORK TO CURRENT STEP			
21.0	HAND FINISHING1	HAND FINISHING RESOURCE #1	
			
Comment: HAND FINISHING RESOURCE #1			
Touch up Alodine		FL/YL 07/01/09 10	
22.0	POWDER COATING	POWDER COATING	
			
Comment: POWDER COATING			
Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3		M.B./a.m. 07/01/10 10X	
23.0	HAND FINISHING1	HAND FINISHING RESOURCE #1	
			
Comment: HAND FINISHING RESOURCE #1			
Wing Walk as per Dwg D3272 and QSI 005 4.4		M103004 FL/YL 07/01/10 10	
24.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION	
			
Comment: Inspect Powder Coat and Wing Walk			
FL 7/01/10 10			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



Date: Thursday, 12/14/2006 3:40:55 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID RH

Job Number: 29968

Part Number: D350591312

Job Number:



Seq. #:

Machine Or Operation:

Description :

25.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

26.0

D22303

Mounting Lug



Comment: Qty.: 4.0000 Each(s)/Unit Total: 40.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 D2230-3 Mounting Lug

B29646 ✓

27.0

D2618

Bushing



Comment: Qty.: 2.0000 Each(s)/Unit Total: 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D2618 Bushing

B28248 ✓

28.0

D2856400

Abrasion Strip



Comment: Qty.: 0.6000 f(s)/Unit Total: 6.0000 f(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D2856-400-720 Abrasion Strip

B29285 ✓

29.0

D32351

Mounting Lug



Comment: Qty.: 2.0000 Each(s)/Unit Total: 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D3235-1 Mounting Lug

B29359 ✓

30.0

D3278041

Support Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

1 D3278-041 Support Assembly

B29236 9X B28273 1X

✓ B28273 1X

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Thursday, 12/14/2006 3:40:55 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID RH

Job Number: 29968

Part Number: D350591312

Job Number:



Seq. #:

Machine Or Operation:

Description :

31.0

AN335A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 AN3-35A

Bolt

M102339 ✓

32.0

AN413A

Bolt



Comment: Qty.: 8.0000 Each(s)/Unit Total : 80.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 AN4-13A

Bolt

M102630 ✓

33.0

AN536A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 AN5-36A

Bolt

M102602 ✓

34.0

AN960JD10

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 40.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 AN960JD10

Washer

M1007436 ✓

35.0

AN960JD416

Washer



Comment: Qty.: 16.0000 Each(s)/Unit Total : 160.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

16 AN960JD416

Washer

M1019386 ✓

36.0

AN960JD516

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 40.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 AN960JD516

Washer

M1002564 ✓

CP 02/01/08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: LD Date: 07/01/11  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 12/14/2006 3:40:55 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID RH

Job Number: 29968

Part Number: D350591312

Job Number:



Seq. #:

Machine Or Operation:

Description :

37.0

MS21042L3

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total: 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 MS21042L3 Nut (or -3)

*M101917*

38.0

MS21042L4

Nut



Comment: Qty.: 8.0000 Each(s)/Unit Total: 80.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 MS21042L4 Nut (or -4)

*M191852*

39.0

MS21042L5

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total: 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 MS21042L5 Nut (or -5)

*M102171*

*EB 02/01/08 (10)*

40.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

*EB 7/24/10 (10)*

41.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D350-591-311

Location: *M B*

*EB 07/01/10*

*EB 07/01/10*

42.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

*EB 07/01/11*

Job Completion



*EB 07.06.11*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D3272	REV. A SHEET 1 OF 2
DATE 04.03.01		TITLE STEP ASSEMBLY, HI LONG	SCALE NTS
A	04.03.01	NEW ISSUE	

RELEASED  
04.04.05 *#*

Part No.	Description	QTY -041	QTY -042
D3272-041	Step Assembly, High Long (LH)	X	
D3272-042	Step Assembly, High Long (RH)		X
D2622-120	STEP EXTRUSION	1	1
D3219-1	SUPPORT	2	2
D3065-041	LEG ASSEMBLY	1	1
D3066-1	SPACER	2	2
D3067-1	END PLATE	2	2
MS20600AD4W4	RIVET	16	16

**GENERAL NOTES:**

- 1) -041 SHOWN, FOR -042 INSTALL D3219-1 SUPPORT OPPOSITE SIDE
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005.4.1  
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 29968

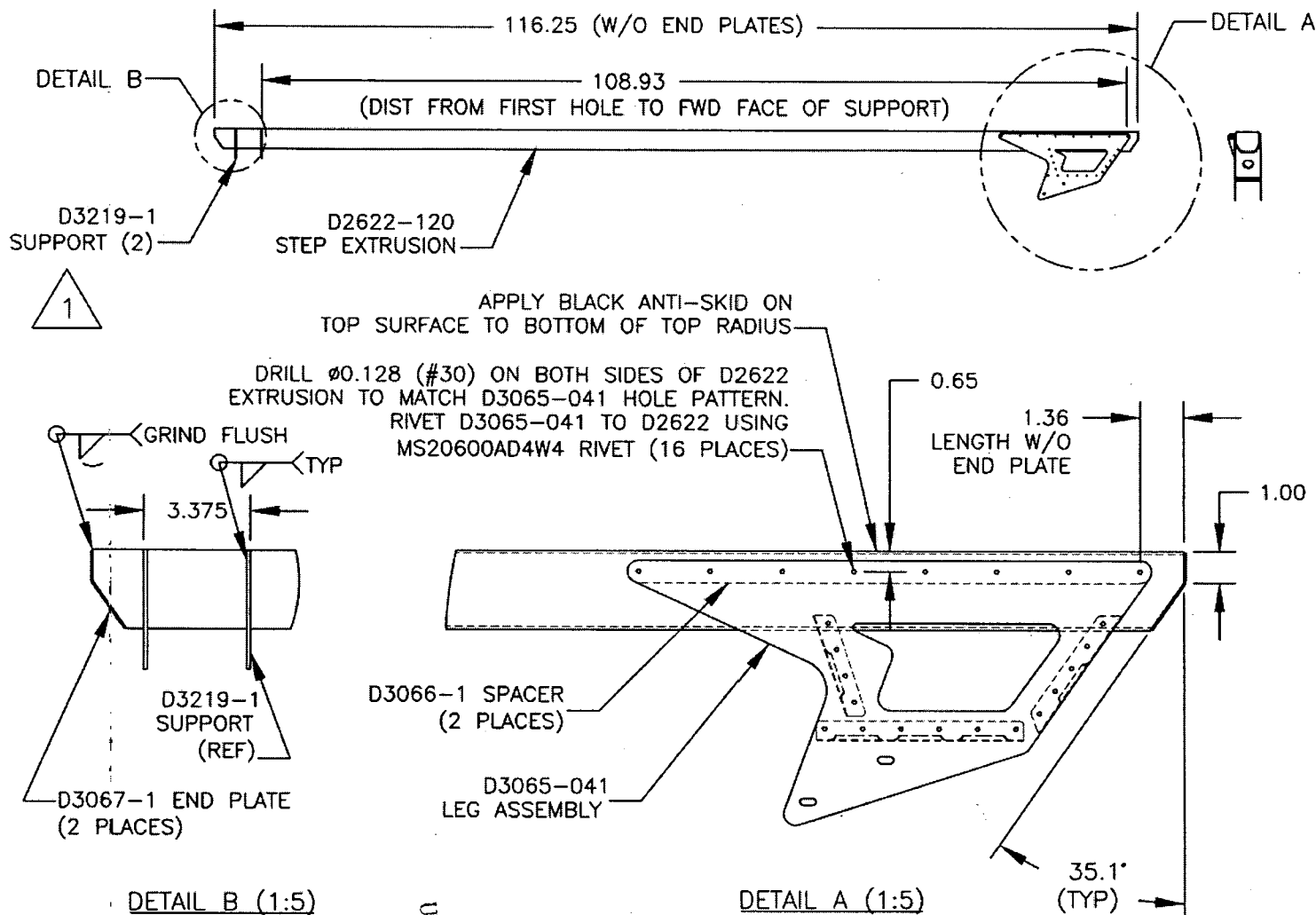
Copyright © 2004 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**



DESIGN	CP	DRAWN BY	CP	DART AEROSPACE LTD
CHECKED	CP	APPROVED	CP	HAWKESBURY, ONTARIO, CANADA
DATE	04.03.01	DRAWING NO.	D3272	REV. A
		TITLE	STEP ASSEMBLY, HI LONG	SHEET 2 OF 2
		SCALE	1:20	



RELEASED

WORK ORDER  
NO. 29968

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE